

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89-147
NPDES PERMIT NO. CA0037737

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

NORTH SAN MATEO COUNTY SANITATION DISTRICT
DALY CITY, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Board), finds that:

1. North San Mateo County Sanitation District, hereinafter Discharger, submitted a report of waste discharge dated May 4, 1989 for reissuance of NPDES Permit No. CA0037737. Additional information was submitted by the Discharger in a letter dated May 15, 1989.
2. The Discharger presently discharges an average dry weather flow (ADWF) of about 6.7 million gallons per day (mgd, 1985 - 1988 flow data) from its secondary treatment plant which has a dry weather design capacity of 8.0 mgd. Treatment facilities consist of automatic barscreens, primary clarifiers, flow equalization basins, pure oxygen activated sludge reactors, secondary clarifiers, and chlorination and dechlorination equipments. Sludge is treated by gravity thickeners, air flotation thickeners, anaerobic digesters, and centrifuges. Final sludge disposal is to a sanitary landfill from November through April and to landspreading from May through October. The plant treats domestic and commercial wastewater from the City of Daly City and portions of San Mateo County and the Westborough Water District within the City of South San Francisco. The treated wastewater is discharged into the Pacific Ocean, a water of the State and United States, west of the Vista Grande Tunnel structure on Ocean Beach, San Francisco County through a submerged diffuser about 2500 feet offshore at a depth of 32 feet below mean lower low water (Latitude 37 deg., 42 min., 48 sec.; Longitude 122 deg., 30 min., 50 sec.).
3. During dry weather, treated wastewater is discharged by gravity to an open storm channel just before it goes underground through the Vista Grande Tunnel. There it combines with any drainage water present and is discharged through the 33-inch ocean outfall. During wet weather, whenever hydraulic capacity of the Vista Grande Tunnel may be exceeded, treated wastewater is discharged via force main around the Tunnel directly to the outfall.
4. The discharge is presently subject to NPDES Permit CA0037737 (Order No. 84-34, adopted on June 20, 1984) which allows discharge into the Pacific Ocean.
5. The Discharger will request an increase in authorized ADWF treatment plant capacity from 8.0 mgd to 10.3 mgd. This request will be based on sewerage treatment facility improvements which are currently under construction and are expected to be completed shortly.

6. The State Water Resources Control Board adopted a revised "Water Quality Control Plan for the Ocean Waters of California" (California Ocean Plan) on September 22, 1988. The Ocean Plan contains a listing of beneficial uses and water quality objectives for the Pacific Ocean.
7. The beneficial uses of the Pacific Ocean are:
 - a. Water Contact and Non-Contact Recreation
 - b. Commercial and Sport Fishing
 - c. Shellfish Harvesting
 - d. Mariculture
 - e. Preservation and Enhancement of Areas of Special Biological Significance
 - f. Preservation of Rare and Endangered Species
 - g. Marine Habitat
 - h. Fish Spawning and Migration
 - i. Navigation
 - j. Industrial Service Supply
8. The Discharger submitted an application for a waiver from secondary treatment requirements for deep water discharge into marine waters in accordance with Section 301(h) of the 1981 Amendments to the Clean Water Act. By letter dated March 17, 1989, the Discharger has withdrawn the 301(h) waiver application.
9. During wet weather, raw sewage overflows may occur when sewer system and pump station capacity is exceeded as a result of excessive infiltration or inflow of rainfall runoff or as a result of pump station failures. Any such overflow is a violation of the requirements of this Order. In a recent infiltration/inflow study, the conclusion was reached that the Discharger's level of infiltration/inflow was not excessive. The completion of the Colma Pump Station in 1987 eliminated the major cause of pump station failure overflows (other than infrequent power interruptions from PG&E). The results of the infiltration/inflow study will be send to the Board shortly.
10. Transmission facilities have been constructed as the first phase of a golf course irrigation wastewater reclamation project using the Discharger's effluent. Until recently, the golf course has been unwilling to accept any reclaimed water. The golf course has agreed to allow the Discharger to irrigate one fairway as a pilot study, pending approval from the appropriate regulatory agencies. The reclamation project is governed by this Board's Order No. 78-71.
11. An Operation and Maintenance Manual is maintained by the Discharger for purposes of providing plant and regulatory personnel with a source of information describing all equipment, facilities, recommended operation strategies, process control monitoring, and maintenance activities. In order to remain a useful and relevant document, the manual should be kept updated to reflect significant changes in treatment facilities or operational procedures.
12. The Discharger has implemented and is maintaining an EPA approved local Pretreatment Program for source control and application of pretreatment standards.

13. This Order serves as an NPDES Permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (California Environmental Quality Act) pursuant to Section 13389 of the California Water Code.
14. The Discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.
15. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the Discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited.
2. The bypass or overflow of untreated or partially treated wastewater to waters of the State, either at the treatment plant or from any of the collection or transport system or pump stations tributary to the treatment plant or outfall is prohibited.
3. The average dry weather flow shall not exceed 8.0 mgd. Average shall be determined over three consecutive dry weather months each year. If the Discharger submits engineering reports for increased effluent discharge to satisfy requirements and demonstrates adequate performance, reliability, and capacity of the completed improvements to the satisfaction of the Executive Officer, treatment plant capacity may be increased up to 10.3 mgd in accordance with Finding #5 above.
4. The discharge of wastewater effluent to the ocean, other than through the deepwater outfall as described in this Order, and in any manner which does not provide sufficient initial dilution to minimize concentrations of substances not removed in the treatment process, is prohibited.
5. Discharge within 1000 feet offshore from the extreme low waterline is prohibited.
6. The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digester supernatant directly to the ocean, or into a waste stream that discharges to the ocean without further treatment is prohibited.

B. Effluent Limitations

1. Effluent discharged shall not exceed the following limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Instan- taneous Maximum</u>
a. Carbonaceous BOD ₅	mg/l	25	40	50	--
b. Total Suspended Solids	mg/l	30	45	60	--
c. Oil and Grease	mg/l	10	--	--	20
d. Settleable Matter	ml/l-hr	0.1	--	--	0.2
e. Turbidity	NTU	75	100	225	--
f. Total Chlorine Residual (1)	mg/l	--	--	--	0.0
g. Toxicity Concen- tration (2)	tu	1.5	2.0	2.5	--

(1) Requirement defined as below the limit of detection in standard test methods.

$$(2) \text{ Toxicity Concentration (tu)} = \frac{100}{96\text{-hour LC50}}$$

When it is not possible to determine the 96-hour LC50 from the bioassay test results due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the following:

$$\text{Toxicity Concentration (tu)} = \frac{\log (100 - S)}{1.7}$$

where S = percent survival in 100 % wastewater.

If $S \geq 99$, the toxicity concentration shall be reported as zero.

- The arithmetic mean of the carbonaceous biochemical oxygen demand (five-day, 20° C) and suspended solids values, by weight for effluent samples collected in a calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period (85 percent removal).
- The pH of the discharge shall not exceed 9.0 nor be less than 6.0.
- The moving median value for the Most Probable Number (MPN) of total coliform bacteria in any five consecutive effluent samples shall not exceed 2400 MPN per 100 milliliters (2400 MPN/100 ml). Any single sample shall not exceed 24,000 MPN/100 ml.

5. Representative samples of the effluent shall not exceed the following limits:

<u>Constituents</u>	<u>Units</u>	<u>6-Month Median</u>	<u>Daily Maximum</u>	<u>Instan- taneous Maximum</u>
a. Arsenic	mg/l	0.01	0.04	0.1
b. Cadmium	mg/l	0.02	0.08	0.2
c. Chromium(VI) (b)	mg/l	0.005	0.02	0.05
d. Copper(a)	mg/l	0.05	0.50	1.40
e. Lead	mg/l	0.1	0.4	1.0
f. Mercury	mg/l	0.001	0.004	0.010
g. Nickel	mg/l	0.1	0.4	1.0
h. Silver	mg/l	0.02	0.08	0.2
i. Zinc	mg/l	0.3	1.2	3.0
j. Cyanide	mg/l	0.1	0.4	1.0
k. Ammonia (expressed as nitrogen) (a)	mg/l	30	120	300
l. Phenolic Compounds (non-chlorinated)	mg/l	0.5	2.0	5.0
m. Chlorinated Phenolics (a)	mg/l	0.05	0.20	0.50
n. Aldrin & Dieldrin (a)	ug/l	0.10	0.20	0.30
o. Chlordane and Related Compounds (a)	ug/l	0.15	0.30	0.45
p. DDT & Derivatives (a)	ug/l	0.05	0.10	0.15
q. Endrin (a)	ug/l	0.10	0.20	0.30
r. HCH (a)	ug/l	0.20	0.40	0.60
s. PCBs (a)	ug/l	0.15	0.30	0.45
t. Toxaphene (a)	ug/l	0.35	0.70	1.05
u. Radioactivity	Not to exceed limits specified in Title 17, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30269 of the California Administra- tive Code.			

(a) These limits are based on Ocean Plan criteria, using a minimum initial dilution value of 49:1. If actual dilution is found to be less than 49:1, these values will be recalculated.

(b) The Discharger may at its option meet this limit as total chromium.

C. Receiving Water Limitations

1. Floating particulates and grease and oil shall not be visible.
2. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
3. Natural light shall not be significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste.
4. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

5. The dissolved oxygen concentration shall not at any time be depressed more than ten percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.
6. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
7. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
8. The concentration of substances set forth in Chapter IV, Table B of the Water Quality Control Plan for Ocean Waters of California, dated September 22, 1988, in marine sediments shall not be increased to levels which would degrade indigenous biota.
9. The concentration of organic materials in marine sediments shall not be increased to levels which would degrade marine life.
10. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.
11. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
12. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
13. The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
14. Discharge of radioactive waste shall not degrade marine life.
15. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for body contact recreation, as determined by the Regional Board the following bacteriological objectives shall be maintained throughout the water column:
 - a. Samples of water from each sampling station shall have a concentration of total coliform organisms less than 1,000 per 100 ml; provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml, and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml.
 - b. The fecal coliform concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

16. At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacteriological objectives shall be maintained throughout the water column:

The median total coliform concentration shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

17. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Sludge Requirements

1. Permanent sludge storage or disposal activities are not authorized by this permit. A Report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencing any such activity.
2. The treatment, disposal, storage, or processing of sludge shall not create a condition of pollution or nuisance as defined in Section 13050(1) and (m) of the California Water Code.
3. The treatment, disposal, storage, or processing of sewage sludge shall not cause waste material to be in any position where it is, or can be, carried from the sludge treatment, disposal, storage, or processing site and be deposited in waters of the State.
4. Any sludge treatment, disposal, storage, or processing site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the disposal site to escape from the site. Adequate protection is defined as protected from at least a 100-year storm and from the highest tidal stage that may occur.

E. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 84-34. Order No. 84-34 is hereby rescinded.
2. Where concentration limitations in mg/l or ug/l are contained in this Permit, the following mass emission limitations shall also apply:

Mass Emission Limit (in lbs/day or kg/day) = Concentration Limit in mg/l x (8.34 or 3.79) x Actual Flow in mgd averaged over the time interval to which the limit applies.

3. The Discharger shall submit a technical report on wet-weather overflows from its collection system by February 1, 1991. The report shall identify all overflow locations, overflow frequency and volume for each location,

and proximity of schools, hospitals, and other sensitive uses for each location. The report shall identify collection system repairs, improvements, and replacements needed to reduce or eliminate wet-weather overflows, including cost and schedule information. Annual progress reports shall be submitted to the Board by February 1 each year starting in 1992. The progress reports shall quantify any sewerage system improvements and their impacts on compliance, wet weather flow quantity, overflow/bypass frequency, and summarize proposed actions for the coming year. The Executive Officer may reduce the scope of the above wet-weather overflow requirements depending on a review of the conclusions reached from the infiltration/inflow study.

4. The Discharger shall implement and enforce its approved pretreatment program in accordance with Regional Board Order No. 84-60 and its amendments thereafter. The Discharger's responsibilities include, but are not limited to:
 - a. Enforcement of national pretreatment standards (e.g., prohibited discharges, categorical standards, local limits) in accordance with 40 CFR 403.5 and Section 307(B) and (C) of the Clean Water Act.
 - b. Implementation of the pretreatment program in accordance with the legal authorities, policies, procedures, and financial provisions described in the general pretreatment regulations (40 CFR 403) and the Discharger's approved pretreatment program including subsequent modifications to the program.
 - c. Submission of annual and quarterly reports to EPA and the State as described in Board Order 84-60 and its amendments thereafter.
5. The Discharger shall comply with all sections of this Order immediately upon adoption.
6. The Discharger shall comply with the attached self-monitoring program. The Executive Officer may make minor amendments to it pursuant to federal regulations (40 CFR 122.63).
7. The Discharger shall comply with all applicable items of the attached "Standard Provisions and Reporting Requirements," dated December 1986.
8. The Discharger shall review and update its Operations and Maintenance Manual annually, or in the event of significant facility or process changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Regional Board by April 15 of each year. Documentation of operator input and review should accompany each annual update.
9. The Discharger shall review and update annually its contingency plan as required by Board Resolution No. 74-10. Annual revisions, or letters stating that no changes are needed, shall be submitted to the Regional Board by April 15 of each year. The discharge of pollutants in violation of this Order where the Discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

10. This Order expires on September 20, 1994. The Discharger must file a Report of Waste Discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
11. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objections. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on September 20, 1989.



STEVEN R. RITCHIE
Executive Officer

Attachments:

Standard Provisions and Reporting
Requirements, December 1986
Self-Monitoring Program
Resolution No. 74-10

[File No. 2179.7021]
[Originator/JMJ]
[Reviewer/SAH]

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

NORTH SAN MATEO COUNTY SANITATION DISTRICT

DALY CITY

SAN MATEO COUNTY

NPDES PERMIT NO. CA0037737

ORDER NO. 89-147

CONSISTS OF

PART A, dated December 1986

AND

PART B

PART B

NORTH SAN MATEO COUNTY SANITATION DISTRICT

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT AND INTAKE

<u>Station</u>	<u>Description</u>
A-001	At any point in the treatment facilities headworks at which all waste tributary to the system is present, preceding any phase of treatment, and exclusive of any return flows or process sidestreams.

B. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point in the treatment facilities between the point of discharge and the point at which all waste from the treatment plant is present following dechlorination.
E-001-D	At any point in the treatment facilities after disinfection is complete and prior to dechlorination.

C. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C	At the outfall sewer
C-1-N	50 feet north of outfall sewer
C-2-N	100 feet north of outfall sewer
C-3-N	500 feet north of outfall sewer
C-1-S	50 feet south of outfall sewer
C-2-S	100 feet south of outfall sewer
C-3-S	500 feet south of outfall sewer

D. LAND OBSERVATIONS

<u>Station</u>	<u>Description</u>
P-1 through P-'n'	Located along the periphery of the waste treatment or disposal facilities, at equidistant intervals, not to exceed 500 feet. (A sketch showing the locations of these stations will accompany each report.)

E. OVERFLOWS AND BYPASSES

<u>Station</u>	<u>Description</u>
OV-1 through OV-'n'	Bypass or overflows from manholes, pump stations, or collection systems.


REPORTING - Shall be submitted monthly and include date, time, quantity, and period of each overflow or bypass and measures taken or planned to prevent future occurrences (see Part A, Section G.2.)

II. SCHEDULE OF SAMPLING, ANALYSIS, AND OBSERVATIONS

The schedule of sampling, analysis, and observations shall be that given as Table I.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in the Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 89-147.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger and revisions will be ordered by the Executive Officer.


STEVEN R. RITCHIE
Executive Officer

Effective Date 9/20/89

Attachments:

Table I and Footnotes
Part A, December 1986

Order No. 89-147

TABLE 1
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS ⁽¹⁾

Sampling Station	A-001	E-001		E-001-D		All P Sta	All OV Sta	All C Sta	
TYPE OF SAMPLE	C-24	(3) G	(3) C-24	Cont	(3) G	C-24	O	O	G
Flow Rate (mgd)				D					
BOD, 5-day, 20°C, CBOD ₅ ; or COD (mg/l & kg/day)	3/W		5/W						
Chlorine Residual & Dos- age (mg/l & kg/day)		(6) 2H or Cont		(6) 2H or Cont					
Settleable Matter (ml/l-hr. & cu. ft./day)		D							
Total Suspended Matter (mg/l & kg/day)	3/W		D						
Oil and Grease (mg/l & kg/day)	2/M	(2) 2/M							
Coliform (Total or Fecal) (MPN/100 ml) per req't					5/W				
Fish Tox'y 96-hr. LC50 (5)			2/M						
Ammonia Nitrogen & Un-ionized Ammonia (mg/l & kg/day)			(7) 2/M					Q	
Nitrate Nitrogen (mg/l & kg/day)									
Nitrite Nitrogen (mg/l & kg/day)									
Total Organic Nitrogen (mg/l & kg/day)									
Total Phosphate (mg/l & kg/day)									
Turbidity (NTU)			D						
pH (units)		D	(7) 2/M					Q	
Dissolved Oxygen (mg/l and % Saturation)		D	2/M ⁽⁷⁾					Q	
Temperature (°C)		D	2/M ⁽⁷⁾					Q	
Salinity (ppt)								Q	
Secchi Disc (inches)								Q	
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)		D							
Arsenic (mg/l & kg/day)			(4) M						
Cadmium (mg/l & kg/day)			(4) M						
Chromium, Total (mg/l & kg/day)			(4) M						
Copper (mg/l & kg/day)			(4) M						
Cyanide (mg/l & kg/day)			(4) M						
Silver (mg/l & kg/day)			(4) M						
Lead (mg/l & kg/day)			(4) M						

TABLE 1 (continued)

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-001	E-001	E-01-D	All P Sta	All OV Sta	All C Sta	Misc. Obsv.
TYPE OF SAMPLE	C-24	G	C-24 Cont	G	C-24	O	O
Mercury (mg/l & kg/day)		(4) M				O	O
Nickel (mg/l & kg/day)		(4) M					
Zinc (mg/l & kg/day)		(4) M					
Phenolic Compounds(non- (mg/l & kg/day)chlorina.)		(4) M					
All Applicable Standard Observations		D			2/W	E	O
Daily Rainfall							
Dewatered Sludge							D (8) D
Chlorinated Phenolics (mg/l & kg/day)		(4) 2/y					
Aldrin and Dieldrin (mg/l & kg/day)		(4) 2/y					
Chlordane & Related Com- (mg/l & kg/day)		(4) 2/y					
DDT and Derivatives (mg/l & kg/day)		(4) 2/y					
Endrin (mg/l & kg/day)		(4) 2/y					
HCH (mg/l & kg/day)		(4) 2/y					
PCBs (mg/l & kg/day)		(4) 2/y					
Toxaphene (mg/l & kg/day)		(4) 2/y					
Radioactivity (pCi/l)		(4) 2/y					

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
 C-24 = composite sample - 24-hour
 Cont = continuous sampling
 O = observation

FREQUENCY OF SAMPLING

E = each occurrence
 H = once each hour
 D = once each day
 W = once each week
 M = once each month
 Y = once each year

TYPES OF STATIONS

A = treatment facility influent stations
 E = waste effluent stations
 C = receiving water stations
 P = treatment facilities perimeter stations
 OV = overflows and bypasses
 Misc. Obsv. = Miscellaneous Observations

2/H = twice per hour
 2/W = 2 days per week
 5/W = 5 days per week
 2/M = 2 days per month
 2/y = once in March and
 once in September
 Q = quarterly, once in
 March, June, Sept.
 and December

2H = every 2 hours
 2D = every 2 days
 2W = every 2 weeks
 3M = every 3 months
 Cont = continuous

FOOTNOTES

- 1/ During any day when bypassing occurs from any treatment unit(s) in the plant, the monitoring program for the effluent shall include the following in addition to the above schedule for sampling, measurement and analyses:
 1. Composite sample for BOD and Total Suspended Solids (Influent and Effluent, for the duration of the bypass or 24 hours, whichever is shorter.)
 2. Grab samples for Total Coliform, Settleable Matter, Oil and Grease, and chlorine residual (continuous or every two hours).
 3. Continuous monitoring of flow.
- 2/ In the event that sampling for oil and grease once every two weeks or less frequently shows an apparent violation of the waste discharge permit monthly average limitation (considering the results of one or two day's sampling as a monthly average), then the sampling frequency shall be increased to weekly so that a true monthly average can be computed and compliance can be determined.
- 3/ Grab samples shall be taken on day(s) of composite sampling.
- 4/ If any sample is in violation of limits, sampling shall be increased for that parameter to weekly until compliance is demonstrated in two successive samples.
- 5/ Fish toxicity shall be determined using 96-hour fish bioassays with 24-hour composite samples representative of the discharged effluent, and one of the following test species: three-spined stickleback, rainbow trout or fathead minnow. Effluent used for fish bioassays must be dechlorinated prior to testing.
- 6/ Data shall be reported using forms provided or approved equivalent. Chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, grab samples shall be taken every 30 minutes until compliance is achieved.
- 7/ Dissolved oxygen, pH, and temperature shall be tested for on the same composite sample(s) used for the bioassay(s) at the start of the bioassay(s) and at intervals of 24, 48, 72, and 96 hours after starting the bioassay(s). Ammonia nitrogen and unionized ammonia shall be tested for on the same composite sample(s) used for the bioassay(s) at the start of the bioassay test(s). The method of calculating unionized ammonia shall be indicated.
- 8/ Daily records shall be kept of the quantity and solids content of dewatered sludge disposed of and the location of disposal.